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The Psychological Impact of Stalking on Female Undergraduates

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ABSTRACT: This study examined the psychological impact of stalking upon female undergraduates, a population previously determined to experience a surprising stalking prevalence rate. Despite common understanding that stalking has deleterious effects, there have been no previous efforts to systematically assess them with standardized measures. Thirty-six female stalking victims were compared with 43 females who had been harassed and 48 controls. Psychological impact was assessed with the Posttraumatic Stress Disorder Scale, the Symptom Checklist-90-R, and the Self-Report Interpersonal Trust Scale. Stalked subjects also had significantly more PTSD symptoms and with greater severity than the harassed or control subjects. Stalked subjects also had significantly higher scores on several subscales of the SCL-90, and had significantly higher positive symptom totals and distress indices.

KEYWORDS: forensic science, stalking, victim impact, PTSD

Despite the fact that stalking has gained national prominence, the scientific study of this phenomenon is at an early stage. Stalking behavior first appeared in the literature as early as 1838, and has subsequently appeared in case reports of erotomania (1,2). Erotomania, as described by De Clerambault (3) is a "delusion of passion" wherein the delusional individual incorrectly believes him or herself to be in a romantic relationship with the victim. However, recent reviews of the available literature reveal the majority of stalkers are not erotomanics, but rather are former intimates of their victims (4,5).

Stalking is a far more common problem than previously thought. In an exploratory study on a college campus, Fremouw, Westrup, and Pennypacker (6) found that 30% of the females and 17% of the males labeled themselves as having been stalked. Eighty percent knew their stalker, and 24% of the males and 40% of the females had seriously dated the stalker. Using a more strict definition of stalking, which included the existence of a "credible threat," the National Violence Against Women Survey (funded by the National Institute of Justice and the Center for Disease Control and Prevention, 7), revealed that 1 out of 12 American women (8.2 million) and one out of every 45 American men (2.0 million) have been stalked during their lifetime. Regardless of the definition, stalking is a serious, widespread phenomenon that is little understood.

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The majority of research on stalking has been directed towards determining characteristics of stalkers (8-11). Although most authors note the deleterious effects of stalking upon victims, there has been almost no systematic attempt to assess these effects. Fremouw, Westrup, and Pennypacker (6) assessed the coping strategies commonly used by students who had been stalked. Confronting and also ignoring the stalker were the two most commonly used strategies. In addition, victims changed their daily routine and schedules in an effort to avoid their stalkers, and female victims often began to carry a self-defense pepper spray (i.e., Mace). As part of a survey of 100 stalking victims referred to a forensic practice, Mullen and Pathe (12) had subjects report the "impact of the stalking upon the victim's health and lifestyle" (p. 13). Not surprisingly, all 100 victims reported that their experience had a significant negative impact upon their lives. All but six had made major lifestyle changes in response to being stalked. The majority reported taking additional security measures, such as getting an unlisted phone number, limiting social outings, or upgrading home security systems. In addition, the survey asked whether victims had experienced certain negative psychological effects. Eighty-three percent reported heightened anxiety, such as panic attacks, jumpiness and hypervigelance. Fifty-five subjects reported intrusive thoughts and flashbacks regarding the stalking, as well as excessive fatigue. Other reported symptoms of distress were sleep and appetite disturbance, nausea, and lowered levels of daily functioning. The authors report that 24 of their subjects had seriously considered suicide. Unfortunately, no standardized measures of clinical impact were used to permit objective interpretation and comparison of these results with clinical samples.

The two studies described above assessed the impact of stalking by victims' responses to descriptive questionnaires. To date, only one published study attempted to empirically ascertain stalking impact. In a survey of 178 counseling center staff members, Romans, Hays, and White (13) asked those who had been stalked to rate their "concern for safety" on a 5-point Likert-type scale ranging from "not concerned" (5) to "very concerned." Because the authors combined stalking victims with those identified as "victims of harassment" (the main distinction apparently being the repetitive nature of stalking), stalking victims' concern for safety was not separately determined. There was no significant difference in concern for safety between those who had been stalked and/or harassed, and a control group.

The purpose of the present study was to assess the psychological impact of stalking among undergraduates who had been victims of stalking. Well-standardized and widely used measures of clinical symptoms were used to systematically determine whether this population did indeed suffer measurable psychological effects relative to control subjects. In addition, this study assessed victims of stalking situations that were less extreme than those seen in a forensic practice, and that are likely more representative of most stalking situations.

Method

The sample was drawn from undergraduates at West Virginia University, in Morgantown, WV. Undergraduates (freshmen through seniors) were solicited from psychology classes and given extra credit points for their participation. Because previous research revealed that the majority of stalking victims in this population were female (6), only female undergraduates were recruited for the current project.

Stalking victims were positively identified by their endorsement of the question; "Have you ever had someone intentionally and repeatedly follow, and/or harass, and/or threaten you?" However, the authors were concerned that this question alone did not adequately capture stalking victims. It was felt that certain repetitive behaviors might inappropriately fall into this category, such as someone who was called three times for a date, or as one case demonstrated, someone who was harassed by her peers for being severely overweight. Towards this end, 36 subjects who additionally endorsed the question, "Would you label the situation you were in as one in which you were being stalked by someone?" formed the "Stalked" group. Forty-three subjects who endorsed the first but not this second question comprised the "Harassed" group. As part of a second phase of this study (not discussed herein), those women who had never been stalked but who had experienced a significant relationship (i.e., longer than 6 months duration) formed a pool of 77 subjects, from which the "Control" group of 48 subjects was randomly drawn.

Measures

The dependent measures consisted of the following scales; Foa's Post-traumatic Stress Disorder Scale (PDS, 14), the Symptom Checklist-90-R (SCL-90, 15), and the Self-Report Interpersonal Trust Scale (16). The PDS is a 49-item self-report measure designed to help diagnose posttraumatic stress disorder (PTSD) based on DSM-IV criteria. The scale is composed of four sections: a) exposure to a traumatic event, b) reexperiencing the traumatic event, c) avoidance, and d) arousal. The PDS yields: a) a rating of whether PTSD criteria are met, b) the number of PTSD symptoms endorsed (maximum = 17), and c) a symptom severity score (maximum = 17)61). The SCL-90 is a widely used and well-validated self-report symptom inventory designed to reflect the psychological symptoms seen in psychiatric and medical patients. Respondents use a 5point scale of distress to endorse or deny 90 symptoms. These then form 9 primary symptom dimensions as well as a positive symptom total and distress index. The Self-Report Interpersonal Trust Scale is a 10-item, Likert-type scale that assesses the degree to which the respondent is generally trusting versus suspicious of others. In addition, the Stalking Behavior Questionnaire previously developed by Fremouw, Westrup, and Pennypacker (6) was included with some minor refinements. Specifically, the list of potential stalking behaviors subjects could endorse was remodeled after a Stalking Survey developed by the Police Executive Research Forum (17).

Results

A total of 232 surveys were administered to female undergraduates from March to October of 1997. Thirty-six were identified as

TABLE 1—Frequencies of stalking behavior.

Impact Measures	Harassed $N = 43$	Stalked $N = 36$	X^2	p (2-Tailed)
Harassed in person	20.1%	16.7%	.232	.775
Harassed by phone	51.1%	86.1%	4.57	.040
Harassed by mail	9.3%	22.2%	2.54	.129
Violated restraining order	2.4%	11.1%	2.55	.172
Damaged personal property	11.6%	30.6%	4.35	.050
Broke into home	4.7%	13.9%	2.07	.236
Stole personal property	14.0%	8.3%	.02	1.00
Left anonymous notes	16.3%	27.8%	1.53	.275
Made verbal threats	51.2%	75.9%	4.71	.038
Made written threats	11.6%	19.4%	.93	.364
Assaulted victim	11.6%	36.1%	6.67	.015
Assaulted someone else	4.7%	30.6%	9.56	.002
Conducted surveillance	9.3%	25.0%	3.51	.074
Visited victim at work	23.3%	38.9%	2.26	.150
Followed victim	37.2%	80.6%	15.01	.001
Made anonymous phone calls	30.2%	47.2%	2.40	.163
Victim reported incident to police	14.0%	41.7%	7.71	.010

victims of stalking and 43 additional subjects fell into the harassed category. Table 1 summarizes the behaviors exhibited by stalkers toward the Harassed and Stalked groups. Individuals in the Stalked group experienced both a greater number and more severe stalking behaviors. Stalking victims were significantly more likely than harassed subjects to be harassed by phone, verbally threatened, followed, and assaulted. In addition, those in the Stalked group were more likely to have had property damaged and to have an associate assaulted by the stalker. Stalked subjects were significantly more likely to report the incidents to the police.

To assess the potential clinical impact of stalking on victims, a one-way analysis of variance was performed between Control, Stalked, and Harassed groups with the SCL-90, PDS, and Self-report Trust Scale as dependent measures. Post hoc comparisons were made utilizing the Scheffe correction to allow for the number of analyses conducted. Table 2 presents the means, standard deviations, and anova results for each group. Significant differences were found on several measures of psychological distress. It is important to note that the most meaningful differences occurred between the Control and Stalked groups, as opposed to the Harassed group. For example, the PDS revealed that Stalked subjects experienced significantly more PTSD symptoms and had significantly greater severity of symptoms than both Controls and Harassed subjects. The Stalked group also had significantly higher scores than the Control group on several subscales of the SCL-90 (the obsessive-compulsive, interpersonal sensitivity, and depression subscales) whereas the Harassed group differed from neither the Controls nor the Stalked subjects. Similarly, the Stalked subjects' positive symptom totals and the distress indices were significantly greater than the Control's, but there were no significant differences between the Harassed group and Controls nor between the Harassed and Stalked subjects. No significant differences were found in reported trust as measured by the Self-report Trust Scale

Discussion

Although the deleterious effects of stalking have been widely reported and assumed, this study represents the first empirical exam-

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TABLE 2—Psychological impact of stalking by group.

Impact Measures	Controls $N = 48$	Harassed $N = 43$	Stalked $N = 36$	F	р
PDS: Number of Symptoms	M 3.90*	M 4.86*	M 9.13†	11.41	.001
	SD 4.84	SD 4.02	SD 5.49		
PDS: Symptom Severity Score	M 5.79*	M 7.00*	M 16.84†	12.37	.001
	SD 8.47	SD 6.63	SD 14.17		
Self-Report Trust Scale	M 27.12	M 27.21	M 26.69	1.63	.85
	SD 4.73	SD 4.13	SD 4.66		
SCL Somatization Subscale	M 63.72	M 67.02	M 72.90	2.41	.09
	SD 18.16	SD 15.31	SD 22.16		
SCL-90OC Subscale	M 58.22*	M 62.12*†	M 68.29†	3.12	.04
	SD 16.73	SD 15.24	SD 21.72		
SCL-90 Interpersonal Sensitivity Subscale	M 61.87*	M 66.83*†	M 75.88†	4.99	.00
	SD 18.51	SD 16.55	SD 24.14		
SCL-90 Depression Subscale	M 65.03*	$M 69.09^{*}^{\dagger}$	M 76.87†	4.02	.02
	SD 17.67	SD 15.98	SD 22.16		
SCL-90 Anxiety Subscale	M 69.37	M 72.22	M 80.90	3.03	.05
	SD 21.63	SD 18.04	SD 23.51		
SCL-90 Hostility Subscale	M 61.11	M 63.61	M 68.48	2.25	.11
	SD 14.42	SD 13.76	SD 18.35		
SCL-90 Phobic Anxiety Subscale	M 71.41	M 76.82	M 85.21	2.95	.05
	SD 26.05	SD 20.77	SD 28.27		
SCL-90 Paranoid Ideation Subscale	M 62.71	M 62.65	M 66.48	0.55	.57
	SD 19.36	SD 14.28	SD 19.20		
SCL-90 Psychoticism Subscale	M 81.66	M 81.80	M 95.55	2.65	.07
	SD 30.51	SD 25.70	SD 32.37		
SCL-90 Experimental PTSD Subscale	M 58.49	M 61.54	M 66.52	2.89	.05
	SD 14.66	SD 12.85	SD 16.86	,	
Grand Total on SCL-90	M 77.69*	M 89.88*†	M 114.12†	3.27	.04
	SD 62.74	SD 51.93	SD 75.18		
Global Severity Index on SCL-90	M 67.88*	M 72.26*†	M 80.94†	3.27	.04
	SD 22.49	SD 18.70	SD 26.95	0.27	
Positive Symptom Total on SCL-90	M 64.52	M 68.64	M 71.88	2.84	.06
	SD 14.29	SD 12.95	SD 14.19		
Positive Symptom Distress Index of SCL-90	M 57.92	M 60.62	M 65.02	2.96	.05
	SD 12.76	SD 11.89	SD 14.16		

*,† Groups with different superscripts are significantly different.

ination of these purported effects using standardized measures of psychological distress. The results of this study verify that victims of stalking do suffer measurable negative psychological effects. Based on the SCL-90, the victims are depressed, have heightened interpersonal sensitivity, and obsessive-compulsive symptoms. The PDS reveals significantly more posttraumatic stress symptoms and higher severity relative to the comparison groups. The results of this study are particularly significant when it is remembered that the stalking situations represented in this project are not the extreme, sensational cases so often presented in the media, nor are they the severe cases typically handled by forensic agencies. In fact, less than half (42%) of the stalked victims reported the stalking to the local police. Nonetheless, these individuals clearly do suffer significant negative effects. Continued efforts to examine, educate, and provide services to this population are tantamount.

This study also demonstrated the necessity of fine-tuning the definition of "stalking." A meaningful difference was revealed between individuals who considered themselves victims of stalking versus those who perceived themselves to be harassed but not stalked. Self-described stalking victims experienced not only more intrusive behaviors, but also more threatening behaviors than the harassed subjects. Not surprisingly, stalked individuals also suffered more negative psychological effects.

A selection bias may have potentially contributed to the differences between the stalked and harassed groups. The women who were more negatively affected may have labeled the experience as stalking, while the less impacted victims may have viewed the incidents as simply harassment. However, the types of stalking behaviors experienced did significantly differ between these groups. The stalked subjects reported more harassing phone calls, damage to property, verbal threats, assaults, and being followed than the harassed group. Therefore, there were significant differences in reported experiences as well as impact between the two groups. Future research should better clarify the factors which lead a victim to label an experience as stalking, as distinguished from harassment. For example, the incident of being followed may be labeled as harassment by one subject but viewed as stalking by another person. Little is known about the variables which control a subject's threshold for labeling and reporting stalking. This is an area for future research.

The authors feel the present study would have been strengthened by incorporating the "credible threat" component to their definition of stalking. That is, in order to be legally considered stalking, many states require that the perpetrator make a credible threat of violence against the victim, as opposed to just following or harassing (18). In fact, it is thought the potential for lethality distinguishes harassment from stalking. The inclusion of the credible threat component may assist future efforts to distinguish stalking phenomena from other forms of interpersonal conflict.

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